

### **Abstract**

5 The present invention relates to an approach to locking the output  
wavelength of a laser that uses an etalon having non-parallel surfaces. Under  
this approach, the non-parallel etalon is formed from a readily available, low  
cost optical component, and may include an etalon with a wedged shape or  
with at least one curved surface. This approach offers significant advantages  
over the use of a planar etalon. It provides two degrees of freedom in  
alignment of the device, and so both the absolute wavelength and the spacing  
10 between the interference fringes can be independently adjusted. It also  
reduces the cost and difficulty of assembly, since it utilizes standard optical  
parts with wide tolerances. The invention may be used within a standard laser  
package. The invention also permits the laser to be tuned to a precise  
operating wavelength by setting various tuning signals according to values  
15 stored in memory.